VI. CLAIMS

What is claimed is:

1. A discrete, preassembled, composite block unit, comprising:

a first wall and a second wall, at least one of which is load bearing and made from a first material;

a lattice-like connective structure formed of a second material different from the first material and connected between the first and second walls, said connective structure having at least two connectors, wherein each of the connectors is connected to one of the first and second walls, such that the first and second walls are securely positioned with respect to one another as opposite faces of a discrete rectangular solid.

2. The block unit of claim 1, wherein the connective structure comprises:

a center form;

at least one arm projecting outwardly from the center form; and

wherein one of the connectors is attached to each end of the at least one arm.

3. The block unit of claim 1, wherein at least one connector is a insert-type connector and one of the first and second walls has a connector formation that is matingly engaged by the connector.

4. The block unit of claim 3, wherein the connector formation is a receptacle and the insert-type connector is compressed and inserted into the receptacle, such that the insert-type connector is frictionally engaged by the receptacle.

5. The block unit of claim 1, wherein each connector is one of a male-female connector pair and engages a corresponding female or male connector formation.

6. The block unit of claim 2, wherein the connective structure comprises:

two end arms and a center arm;

wherein the center arm is vertically displaced on the center form with respect to the end arms.

7. The block unit of claim 6, wherein the center arm comprises at least one recess for receiving a reinforcing bar.

8. The block unit of claim 6, wherein the connective structure further comprises a reinforcing arm connected to at least one of the other arms.

9. The block unit of claim 6, wherein the top of the center arm is flush with the top of the first and second walls.

10. The block unit of claim 1, wherein each of the connectors is matingly engaged in one of the first and second walls.

11. The block unit of claim 1, wherein the connective structure is substantially composed of a plastic material.

12. The block unit of claim 1, wherein the connective structure has a partition that forms a first cavity with the first wall and a second cavity with the second wall.

13. The block unit of claim 12, wherein the first cavity is larger than the second cavity.

14. The block unit of claim 1, wherein at least one connector is a compressible V-shaped connector.

15. The block unit of claim 1 further comprising:

a center form having one side facing the first wall and one side facing the second wall;

at least one arm projecting from either side of the center form;

wherein each at least one arm has a connector; and

wherein the projection length of the at least one arm is not equal to the projection length of the other at least one arm.

16. The block unit of claim 15, wherein the center form is selectively positioned responsive to the amount of insulation or concrete to be received within a wall to be constructed from said block unit.

17. A connective structure for forming a discrete, preassembled, composite block unit, comprising:

a plurality of elements forming a lattice;

connectors formed in the lattice for connecting the connective structure between a first wall and a second wall; and

handle means for grasping and manipulating the block unit after joining with the first wall and second wall, said handle means being located in a generally balanced position relative to the preassembled, composite block unit.

18. The connective structure of claim 17, wherein the lattice elements comprise:

a center form;

two end arms projecting outwardly from each side of the center form and substantially perpendicularly from the center form, wherein both ends of each end arm have a connector;

a center arm projecting outwardly from each side of the center form and substantially perpendicularly from the center form, wherein both ends of the center arm have a connector; and

wherein the connective structure is integrally formed of a substantially rigid material.

19. The connective structure of claim 17, wherein at least one of the connectors is an compressible insert-type connector.

20. The connective structure of claim 19, wherein the compressible insert-type connector is V-shaped.

21. The connective structure of claim 17, wherein the connectors for connecting the connective structure between a first wall and a second wall comprises at least one connector for connection to each of the first and second walls.

22. The connective structure of claim 18, wherein the end arms and the center arm are longer on one side of the center form than on the other side.

23. The connective structure of claim 18, wherein the center form is selectively positioned responsive to the amount of insulation or concrete to be received within a wall to be constructed from said block unit.

24. The connective structure of claim 18 further comprising at least one reinforcing arm connected between the center form and an arm.

25. A method for constructing a load bearing wall, comprising:

constructing a plurality of block units by

providing a first wall and a second wall, at least one of which is load bearing and made from a first material;

providing lattice-like connective structure formed of a second material different from the first material, said connective structure having at least two connectors;

placing the connective structure between the pair of walls such that each of the connectors is connected to one of the first and second walls, such that the first and second walls are securely positioned with respect to one another as opposite faces of a discrete rectangular solid; and

stacking and mortar-joining the plurality of constructed block units to form the load-bearing wall.

26. The method of claim 15 wherein the step of providing a lattice-like structure includes providing as part of the lattice a partition element that is substantially parallel to the first and second walls and between them and wherein the load-bearing wall is partitioned into a first and second cavity by the adjacent partition elements of adjacent block units.

27. The method of claim 26, further comprising at least partially filing the second cavity with insulative material.

28. The method of claim 26, further comprising at least partially filing the first cavity with a substantially concrete material.

29. The method of claim 28, further comprising inserting reinforcing material into the first cavity.

30. The method of claim 26 wherein the partition elements of adjacent block units of the load-bearing wall are adjacent, and further comprising forming a sealing relationship between adjacent partition elements.

31. The method of claim 25, wherein the act of providing a lattice-like connective structure further comprises selectively positioning a partition element in the lattice-like connective structure responsive to the amount of insulation or concrete to be received within the wall to be constructed from said block units.

32. A method for making a discrete block unit for use in constructing load-bearing walls, comprising:

providing an inner wall having at least one of a first type of connector;

providing an outer wall having at least one of a first type of connector;

providing a lattice-like connective structure having a second type of connector on each side of the connective structure; and

matingly engaging the inner wall first type connector to one of the connective structure's second type connectors and matingly engaging the outer wall first type connector to the connective structure's other second type connector;

such that the inner and outer walls are securely attached to one another as opposite faces of a discrete rectangular solid load bearing block unit.

33. The method of claim 32, wherein the act of providing a lattice-like connective structure comprises forming a connective structure from a substantially plastic material.

34. The method of claim 32 wherein the act of matingly engaging further comprises initially compressing the second type of connector.

35. A discrete block unit comprising:

a first wall and a second wall, at least one of which is load bearing and each of which has a connector formation; and a lattice-like connective structure positioned and connected between the outer and inner walls, said connective structure having at least one connector for engaging the connector formation at the first wall and at least one connector for engaging the connector formation at the second wall.

36. A discrete block unit as claimed in claim 35 wherein at least one of the connectors in the connective structure is deformed before engagement with the connective formation of one of the

inner and outer walls so as to partially surround and apply a compressive force to a portion of the connective formation.

37. A discrete block unit as claimed in claim 35 wherein at least one of the connectors in the connective structure is adhesively secured to the connector formation of one of the first and second walls.

38. A discrete block unit as claimed in claim 35 further comprising an insulating mass having approximately the same height and width dimensions as the first and second walls, said mass being formed for insertion in engagement with the connective structure so as to provide a barrier to energy movement between the first and second walls.

39. A discrete block unit as claimed in claim 35 wherein the first wall and the second wall are made of different materials.

40. A discrete block unit as claimed in claim 35 wherein at least one of the first wall and the second wall has a surface treatment.

41. A discrete block unit as claimed in claim 35 wherein at least one of the first and second walls is integrally formed with the connective structure.

42. A discrete block unit as claimed in claim 41 wherein the at least one of the first and second walls that is integrally formed with the connective structure defines an airflow aperture in the at least one wall.

43. A discrete block unit as claimed in claim 41 wherein the at least one of the first and second walls that is integrally formed with the connective structure defines an electrical element aperture in the at least one wall.

44. A discrete block unit comprising:

a first wall and a second wall, at least one of which is load bearing; and

a connective structure positioned and connected between the first and second walls, said connective structure having an adhesive connection to at least one of the first wall and the second wall.

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